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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,573	06/24/2005	Naoki Kobayashi	016778-0498	6434
22428 7590 08/24/2007 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER HUANG, WEN WU	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 08/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,573

Applicant(s)

KOBAYASHI ET AL.

Examiner

Wen W. Huang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/30/07 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12, 14 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 12 and 16 recite "the slot ". However, the Examiner submits that nowhere in the specification of the instant application has support for said first slot.

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Regarding claim 16, the Examiner cannot find any support regarding the joint 29 of fig. 5 being configured to be coupled to either the back surface of the upper casing at the top of the upper casing, or a front surface of the lower casing at a bottom of the lower casing.

Claim 14 requires a built-in antenna mounted on the outer surface of the lower casing. However, the Examiner could not find any support for such teaching in the specification of the instant application.

Claim Objections

Claims 11, 15 and 16 are objected to because of the following informalities:

Claims 11, 15 and 16 require a joint provided on the dielectric member. However, the Examiner submits that fig. 5 of the instant application clearly teaches the joint 29 is provided on the antenna 16, not on the dielectric member 28, 30 or 31. The Examiner considers the joint 29 to be part of antenna 16 in order to be consistent with the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harano (US PUB NO. 2002/0142794 A1) in view of Bickert et al. (US. 5,907,307; hereinafter "Bickert")

Regarding **claim 1**, Harano teaches a portable telephone (see Harano, fig. 8) comprising

an upper casing (see Harano, fig. 8, component 21) provided with a speaker (see Harano, fig. 8, component 25) and a display screen (see Harano, fig. 8, component 26) and a lower casing (see Harano, fig. 8, component 22) on which a keyboard is disposed (see Harano, fig. 8, component 23), wherein an antenna is mounted on an upper end of the upper casing (see Harano, fig. 8, component 23).

Harano is silent to teaching that wherein a dielectric member with a predetermined dielectric constant and little loss is mounted on a back side of the antenna such that the back side of the antenna is entirely coupled to and thereby covered by a surface of the dielectric member and such that the dielectric member is positioned farther away from a head of a user than the antenna is positioned with respect to the head of the user, when the user is operating the portable telephone. However, the claimed limitation is well known as evidenced by Bickert.

In the same field of endeavor, Bickert teaches a portable telephone (see Bickert, fig. 3) wherein a dielectric member (see Bickert, fig. 2, dielectric object 12, col. 11, lines 60-67) with a predetermined dielectric constant and little loss (see Bickert, col. 12, lines 38-41) is mounted on a back side of the antenna (see Bickert, fig. 2, antenna 10) such

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that the back side of the antenna is entirely coupled to and thereby covered by a surface of the dielectric member (see Bickert, fig. 2 and 3, dielectric 12 covers antenna 10) and such that the dielectric member is positioned farther away from a head of a user (see Bickert, fig. 2, head 14) than the antenna is positioned with respect to the head of the user, when the user is operating the portable telephone (see Bickert, fig. 4, col. 12, lines 54-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano with the teaching of Bickert in order to re-direct harmful radio electromagnetic wave energy away from the user's head (see Bickert, col. 2, lines 45-48).

Regarding **claim 5**, the combination of Harano and Bickert also teaches the portable telephone according to claim 1, wherein the dielectric member has a curved surface on a side opposite to the antenna (see Bickert, fig. 2, dielectric 12).

Regarding **claim 8**, the combination of Harano and Bickert also teaches the portable telephone according to claim 1, wherein the antenna is an inverted-L-shaped antenna (see Harano, fig. 5, component 11).

2. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fehrm (US. Pub No. 2003/0232628 A1) in view of Wong (US. 6,615,026 B1).

Regarding **claim 13**, Fehrm teaches a portable telephone (see Fehrm, fig. 1) comprising

an upper casing (see Fehrm, fig. 1, component 1) provided with a speaker (see Fehrm, fig. 1, component 6) and a display screen (see Fehrm, fig. 1, component 4) and a lower casing (see Fehrm, fig. 1, component 2) on which a keyboard is disposed (see Fehrm, fig. 1, component 8), wherein an antenna is mounted on a lower end of the lower casing on an outer surface of the lower casing (see Fehrm, fig. 1, component 11).

Fehrm is silent to teaching that wherein a dielectric member with a predetermined dielectric constant and little loss is mounted on a front side of the antenna such that the front side of the antenna is entirely coupled to and thereby covered by a surface of the dielectric member and such that the dielectric member is positioned farther from where a palm of a user is located than the antenna is positioned with respect to the palm of the user, when the user is holding the portable telephone within the palm in order to operate the portable telephone. However, the claimed limitation is well known as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein a dielectric member (see Wong, fig. 1, component 18) with a predetermined dielectric constant and little loss (see Wong, col. 3, lines 10-15) is mounted on a front side of the antenna (see Wong, fig. 1, component 12) such that the front side of the antenna is entirely coupled to and thereby covered by a surface of the dielectric member (see Wong, figs. 1-4) such that the dielectric member is positioned farther from where a palm of a user is located than the antenna is positioned with respect to the palm of the user,

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when the user is holding the portable telephone within the palm in order to operate the portable telephone (see Wong, fig. 1 and 4; component 12 is closer to the back surface of the portable telephone where the user's palm is placed than component 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Fehrm with the teaching of Wong in order to direct harmful radio electromagnetic wave away from the user's head (see Wong, col. 2, lines 13-14).

Regarding **claim 14**, the combination of Fehrm and Wong also teaches the portable telephone according to claim 13, wherein the antenna is a built-in antenna built in the lower casing (see Wong, fig. 1).

3. Claims 3, 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harano and Bickert as applied to claim 1 above, and further in view of Wong.

Regarding **claim 3**, the combination of Harano and Bickert teaches the portable telephone according to claim 1.

The combination of Harano and Bickert is silent to teaching that wherein the dielectric member is a dielectric member in shape of hemicylinder. However, the claimed limitation is well known in the art as evidenced by Wong.

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In the same field of endeavor, Wong teaches a portable telephone wherein the dielectric member is a dielectric member in shape of hemicylinder (see Wong, fig. 2, component 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Wong in order to direct harmful radio electromagnetic wave away from the user's head (see Wong, col. 2, lines 13-14; Bickert, col. 12, lines 3-4).

Regarding **claim 4**, the combination of Harano and Bickert teaches the portable telephone according to claim 1.

The combination of Harano and Bickert is silent to teaching that wherein the dielectric member is a dielectric member in shape of rectangular. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein the dielectric member is a dielectric member in shape of rectangular (see Wong, fig. 4, component 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Johnson with the teaching of Wong in order to direct harmful radio electromagnetic wave away from the user's head (see Wong, col. 2, lines 13-14; Bickert, col. 12, lines 3-4).

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Regarding **claim 7**, the combination of Harano and Bickert teaches the portable telephone according to claim 1.

The combination of Harano and Johnson is silent to teaching that wherein the antenna is a dipole antenna. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein the antenna is a dipole antenna (see Wong, col. 2, lines 49-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Wong in order to direct harmful radio electromagnetic wave away from the user's head (see Wong, col. 2, lines 13-14).

4. Claims 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harano and Bickert as applied to claim 1 above, and further in view of Shoji et al. (US. 7,031,762 B2; hereinafter "Shoji")

Regarding **claim 6**, the combination of Harano and Bickert also teaches the portable telephone according to claim 1.

The combination of Harano and Bickert is silent to teaching that wherein the antenna is a built-in antenna built in the upper casing. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a built-in antenna built in the upper casing (see Shoji, fig. 9, component 50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

Regarding **claim 9**, the combination of Harano and Bickert teaches the portable telephone according to claim 1.

The combination of Harano and Bickert is silent to teaching that wherein the antenna is a monopole antenna. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a monopole antenna (see Shoji, col. 2, line12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

Regarding **claim 10**, the combination of Harano and Bickert teaches the portable telephone according to claim 1.

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The combination of Harano and Johnson is silent to teaching that wherein the antenna is a meander antenna. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a meander antenna (see Shoji, col. 2, line 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harano and Bickert as applied to claim 1 above, and further in view of Filipovic (US. 6,590,544 B1).

Regarding **claim 2**, the combination of Harano and Bickert teaches the portable telephone according to claim 1.

The combination of Harano and Bickert is silent to teaching that wherein the dielectric member is a dielectric member in shape of hemisphere. However, the claimed limitation is well known in the art as evidenced by Filipovic.

In the same field of endeavor, Filipovic teaches an antenna wherein the dielectric member is a dielectric member in shape of hemisphere (see Filipovic, col. 2, lines 39-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Filipovic in order to improve the directivity of the antenna (see Filipovic, col. 2, lines 22-23; Bickert, col. 12, lines 3-4).

6. Claim 11, 12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harano in view of Bickert and Haruyama (US. 6,684,085 B1).

Regarding **claim 16**, Harano teaches a portable telephone (see Harano, fig. 8) comprising

an upper casing (see Harano, fig. 8, component 21) provided with a speaker (see Harano, fig. 8, component 25) and a display screen (see Harano, fig. 8, component 26) and a lower casing (see Harano, fig. 8, component 22) on which a keyboard is disposed (see Harano, fig. 8, component 23), wherein an antenna is mounted on an upper end of the upper casing (see Harano, fig. 8, component 23).

Harano is silent to teaching that

wherein a dielectric member with a predetermined dielectric constant and little loss is integrally coupled to the antenna, the dielectric member is positioned farther away from a head of a user than the antenna is positioned with respect to the head of the user, when the user is operating the portable telephone,

wherein the joint is configured to be coupled to the surface of the casing,

wherein the first or second slot are used to connect antenna, dielectric and casing.

In the same field of endeavor, Bickert teaches a portable telephone (see Bickert, fig. 3) wherein a dielectric member with a predetermined dielectric constant and little loss is integrally coupled to the antenna (see Bickert, fig. 2, dielectric object 12, col. 11, lines 60-67 and col. 12, lines 38-41), the dielectric member is positioned farther away from a head of a user (see Bickert, fig. 2, head 14) than the antenna is positioned with respect to the head of the user, when the user is operating the portable telephone (see Bickert, fig. 4, col. 12, lines 54-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano with the teaching of Bickert in order to re-direct harmful radio electromagnetic wave energy away from the user's head (see Bickert, col. 2, lines 45-48).

The combination of Harano and Bickert is silent to teaching that wherein the joint is configured to be coupled to the surface of the casing, wherein the first or second slot are used to connect antenna, dielectric and casing.

In the same field of endeavor, Haruyama teaches wherein the joint is configured to be coupled to the surface of the casing (see Haruyama, fig. 3, component 22, col. 5, lines 19-27), wherein the first or second slot are used to connect antenna, dielectric and casing (see Haruyama, col. 4, lines 46-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Harano and Bickert with the teaching of Haruyama in order to protect the user of the portable telephone from harmful radiation (see Haruyama, col. 2, lines 15-17).

Regarding **claim 17**, the combination of Harano, Bickert and Haruyama also teaches that wherein the joint corresponds to a feeding section that feeds power to the antenna from the portable telephone when the antenna and the dielectric member are fitted onto an outer surface of the portable telephone (see Haruyama, col. 4, lines 46-50).

Regarding **claims 11, 12 and 15**, the dependent claims are interpreted and rejected for the same reasons as set forth above in claims 16 and 17.

Response to Arguments

Applicant's arguments with respect to claims 1, 13 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen W. Huang whose telephone number is (571) 272-7852. The examiner can normally be reached on 10am - 6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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8/15/07



MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER